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Visual Instruction News

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Making An Educational Movie

Home Made Lantern Slides In The Teaching Of Plane Geometry

The Habit Of Criticizing The Motion Picture

Visual Aids And The Economic Situation

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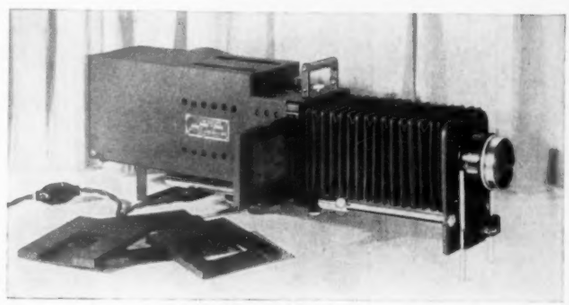

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JANUARY, 1934

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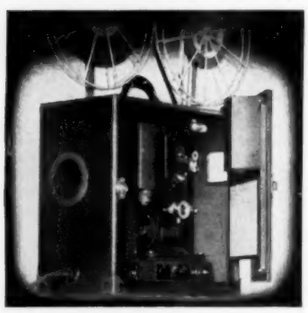

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Making an Educational Movie

CHARLES A. GRAMET

WHY MAKE pictures? Have you thought of making an educational movie? So many teachers own cameras that it is somewhat surprising that we have not had more pictures from them. Here is an opportunity to combine vocation and avocation, to the improvement of both.

I have been persuaded to tell of my experiences because I believe that in doing so I may persuade others to do likewise and that the resulting exchange of ideas will be profitable to all concerned. "Why", I have been asked, "should we as amateurs compete with professional commercial companies? And how can we with our limited facilities and equipment produce pictures comparable with the commercial producers?"

In pictorial photography amateurs compete very successfully with professionals. In the opinion of many competent critics the better amateurs outrank the better professionals. It is my belief and conviction that in the field of teaching pictures we have a great opportunity to improve the character of teaching films. Not equipment but ideas and organization are needed.

In this paper I shall present principles and practices resulting from my own experiences. In subsequent papers I shall illustrate these principles more fully with reference to several pictures that I have produced. If this article provokes thought, activity and production I shall feel satisfied that I have contributed to the improvement of visual instruction, a field in which I am vitally interested.

Motion pictures are still a novelty in teaching. How many teachers use them effectively? Many whose traditional methodology is excellent, fail badly in using this new tool. The inherent entertaining character of motion pictures appears to take precedence over their use as teaching tools. Frequently the picture itself is at fault. The organization, development or content do not lend themselves to use as part of the teaching process. A large percentage of commercial pictures fail to realize these potential values and there are few pictures but could be improved by the application of sound teaching principles to their construction. It is my belief that the capable, experienced teacher, with an interest in and some ability in picture making, can make a definitely worthwhile contribution in this field.

Developing the Film Lesson

Planning a motion picture lesson is very much like planning any other. We first select the topic. If the subject is to be represented by motion pictures it should naturally be one in which the elements of time and motion are essential for comprehension. We should ask ourselves—"Is a motion picture necessary? Would not a slide, chart, diagram or enlarged picture do as well? Would not the material itself be better? Is it the best available aid?" Any picture is only a substitute for the real thing. Not every topic is well represented in motion pictures; nor do many topics require such representation. Only where this type of presentation would give a clearer concept than any other the topic is a suitable one for a motion picture lesson.

To get the interest of our heterogeneous and often ill-assorted groups of pupils most lessons require motivation. Usually when a class learns that a motion picture is to be shown interest is readily aroused. The kind of interest that we want, however, must be real, not artificial or superficial. The interest must be in the subject or problem and must beget attention directed to the solution of the problem that is being studied. Thus we can and should picture a motivation for the lesson.

The selection of material depends upon the aim of the lesson. For a review lesson we can include considerable material; for a new subject we must limit the number of ideas or concepts to those which the class can master or assimilate in the period of the lesson. It appears to me that the available teaching films suffer from the fact that they contain more than can be taught in one lesson. We cannot defend them on the basis that they are review films because many of them are needed for and designed as films to illustrate the original presentation of the subject. It is at this time that pictures are so often needed to clarify, explain, illustrate and translate word or auditory images into visual images. Select, then the ideas or concepts that are to be presented in the lesson and plan your film around these, excluding extraneous material.

This implies that the same pictures or "shots" may be used in different organizations for different purposes. A film may be used to provoke interest in a unit of content; to illustrate ideas or concepts that are presented as new material; to review a unit of content; to broaden the point of view and stimulate interest in related topics. The organization of the film lesson must be planned to accomplish the aim.

We expect that, as a result of every lesson, something is accomplished. If it is the mastery of a principle we expect a generalization; if it is the acquisition of necessary information, drill or review; if it is the solution of a problem, an application step. The film lesson, too, should conclude with a generalization, review or application.

The Continuity

After the lesson has been planned, we develop the continuity. This is our work sheet. Can you recall in your novice teaching days writing out the entire lesson to be taught, even to writing each question in the sequence? We can thus insure completion of the topic in the time allotted to it and hewing to the line. This is especially important in making a picture lesson. The continuity is the sequence of shots, including the titles. From the pedagogic point of view it indicates the development of the lesson; from the economic point of view it limits the amount of film to be used; from the pictorial point of view it tells us what is to be represented; from the point of view of organization it tells us the relative importance of scenes and their sequence in the lesson. The more carefully the continuity is planned the better will be the lesson and the less expensive the cost of the picture.

The shots need not be taken in the sequence of the continuity. Very often it isn't possible, more often it isn't practical. The sequence is taken care of in the editing process which will be explained later. How closely shall we adhere to the continuity? A similar problem is present in working out any type of lesson. If a question is asked or a situation arises in the course of a lesson that transcends in importance the planned topic, it should be answered or solved. The best teaching situation is that which arises from the felt needs of the pupils. Thus, if during the filming of the lesson, a better point of view presents itself, or the planned method does not appear to solve the problem adequately, we must be alert to change to a different solution.

For the novice in motion picture work the continuity should be very specific. Each step in the sequence should be described in detail and should be adhered to. We cannot depend upon memory, inspiration or whim. Experience, as in the classroom, will permit more liberty. Always, the continuity should be given careful, deliberate thought that it merits.

Equipment

"Cut your suit according to your cloth." Plan your film lesson in relation to your equipment. We should study to get all from our equipment that it can provide. We seldom do. Even in professional studios large sums are frequently spent on elaborate accessory apparatus which is subequently discarded when it is found that the original apparatus can solve the problem with little alteration. When the number of topics is so large, we should have little difficulty in choosing one that lies within the limitations of our equipment. If ambition spurs us to attempt more elaborate pictures, we may find it possible to solve our special problems with simple home-made adapters. If we cannot solve them, we merely plan a different lesson.

It is difficult to describe a minimum equipment because so many factors are involved, chief of which, of course, is the amount of money available for investment. Any type of work is within the power of the amateur, if he can afford the equipment. Special types of work may involve special apparatus. This is especially true in scientific work. Let us assume that the first pictures will involve no special effects, just straight photographic representation. Let us assume further that the equipment is owned by the teacher. Perhaps some day schools or systems may see the wisdom and economy of owning adequate photographic equipment. The following minimum equipment should produce satisfactory pictures.

1. A 16 mm. camera with a reliable spring motor and shutter. Hand cranking is often desirable when the action is prolonged but is not dispensable. 100 foot film capacity is essential. I do not approve of the smaller film widths for classroom use. Moreover, the 16 mm. size may even be used in large auditorium showings, smaller sizes cannot be so used. 35 mm. film while it has advantages, is expensive to use and cannot be directly projected in the classroom.
2. A tripod is essential in taking good motion pictures. The motion should be confined to the actors and should not be present in the camera. Our friends and family may forgive us when our pictures oscillate, sway or tip, but for teaching purposes the films should be free from these special effects that distract, amuse or tire.
3. If indoor pictures are to be included, and they surely will, adequate sources of light are needed. The new photoflood lamps are very satisfactory. However, if we plan much work, and the current lines will carry the load, 500 watt projection-type lamps will prove economical in the long run and they will not expire during the taking of a scene. Photoflood lamps have a short life. In any case suitable reflectors should be used to get the maximum efficiency from the lamps. The amount of light needed will depend upon the area to be covered as well as the nature of the scene. Experience alone will tell us how much light we may need. The more light that is available, the more liberty we will have in the use of our equipment. A minimum of several thousand watts is desirable.
4. For lens equipment, if only one lens is available, we should have a 1" fast lens of the speed f 1.9 or greater. You will need that for indoor work. Good lenses are corrected

for color and curvature aberration and are preferred. By shifting the camera, close or far shots can be taken with this lens. If more lenses may be purchased, a short focus and a three inch lens seem ideal equipment for our needs, the former for indoor work or outdoor work at close quarters, and the latter for medium distance shots.

5. Unless one has had considerable experience in judging light intensities, a photometer is essential. Even experienced photographers find one indispensable. I find that one saves the cost of the meter in a short time through the film saved from improper exposure. There are many on the market, costing from a few dollars to about twenty-five. The latter use photoelectric cells and are the most reliable.
6. For closeups a distance meter is needed and I have found that a good steel tape is the most reliable as well as the cheapest.

Photographing the Picture

Any knowledge or experience that we may have had with still photography will have application in taking motion pictures. Principles of composition apply with added weight in the latter field.

If the projector were stopped at any instant, the picture on the screen should be a pleasing one. I have seen some, that were this done, would show decapitated demonstrators; scenes tipped at perilous angles; diffused pictures that appear myopic; others that have so many things represented that one is confused in trying to center the interest on any one. It may be profitable, therefore, to review, very briefly and superficially, some elementary rules of composition.

The interest in each scene should be centralized and not scattered. This centralization may be effected by position and the principle object so placed in the picture that the eye is immediately drawn to it. Other methods of doing this are by representing the principle object by itself; by pointing to it; by focusing sharply on it while the rest of the scene is diffused.

Balance is pleasing to the eye. Large dark masses in one part of the picture, with corresponding spaces in other parts are not pleasing. Unity likewise is necessary. Discordant elements should not be included in the same picture. Everything in the picture or scene should contribute to the idea that we wish to convey. The arrangement of the parts should emphasize the chief element.

Finally, I believe that some attention should be given to the design of each picture or scene. This includes what has been said of balance and unity. It includes also interest and point of view. Amateurs in photography have often pioneered in trying novel points of view with a resulting increase in interest and freshness. This should not be interpreted to include the bizarre or freakish.

If you plan to use pupils in your pictures, you need have little concern about makeup, costumes, etc. We shall leave these problems to the commercial pictures. The disposition of your lights and the use of suitable film will give contrast, modeling and life-like representation to your characters. Select pupils of intelligence, free from distracting defects, that can follow instructions and that will enter sympathetically into the making of your picture. Children are natural actors. Let them act naturally; avoid the stilted and artificial.

You will find it necessary to rehearse each scene before taking. When the camera starts, errors cannot be corrected except by retaking and this is costly in time and film. Run through each scene as many times as seems necessary. Then cross your fingers and take.

I sometimes find that several ways of taking a scene appear equally attractive. I take both. The added cost is not great and the opportunity may not be available another time. Frequently we can judge the effectiveness of a scene only when we project it later.

Take more footage of the scene than you expect to use. When you edit you will need the extra inches for cutting. It is difficult to give any rules for the length of a scene. We must take a scene to the completion of its action. Even, here, however, we may omit some of the action, if we represent the beginning and the end. Instruction books on movie making say that a scene should, in general, be about four or five feet in length, no less. For teaching pictures this rule is very elastic. In any case each scene must be long enough to make its point and not overlong so that it drags or bores. Often a succession of very short shots build up interest. Take enough feet so that in the editing of the picture enough film is available to construct the lesson as we wish to have it.

A final word as to the film used. Most amateurs use the reversible type of film. This is made so that when it is sent to the company for processing, it is developed and then reversed, so that we get back a positive print ready for projection. This film usually gives satisfactory results. However, the process of reversal seems to give a softer picture that does not project as well in a large room. I am informed that some companies will, if especially requested, give a "Contrasty" development, which will project better. I prefer to use negative film. This increases somewhat the cost of the first print, for we obtain a negative from which a positive print must be made. If additional prints are wanted from the negative, the cost is less in the latter case, and in my opinion, superior.

(To be concluded in February)

Home Made Lantern Slides in the Teaching of Plane Geometry

N. L. MARTIN

THIS experiment was conducted to get some objective evidence relative to the effectiveness of lantern slides in the teaching of Plane Geometry. The specific questions which were raised are the following:

(1) Will a series of correlated "homemade" lantern slides increase the effectiveness of the presentation?

(2) Does the value of the lantern slide as a visual aid vary directly or inversely with the native capacity of the individual student?

(3) How does the value of the lantern slide in the teaching of Plane Geometry affect the achievement of the individual student?

Picture Materials

The experiment involved sixty lantern slides on Congruency of Triangles, Parallel Lines and other straight line figures, and sixty slides on Circles and Loci. The slides of the first sixty included the following:

(1) Five typewritten cellophane slides introducing the subject of Plane Geometry, including the incident of Ptolomy and Euclid and "Reasons for Studying Geometry."

(2) Ten etched glass slides introducing new terms used in beginning the study of Plane Geometry including the uses of such terms as angles, triangles, perpendiculars, and other necessary terms used in introducing the new subject.

(3) Ten slides illustrating the three ways of making an exact copy of a triangle, which later is called the three ways of proving triangles congruent.

(4) Five slides on congruency of right triangles.

(5) Ten slides introducing parallel lines, transversals, alternate interior angles, alternate exterior angles, corresponding angles.

(6) Five slides on the sum of the angles of a triangle, exterior angle, and non-adjacent interior angles.

(7) Fifteen slides on the various kinds of parallelograms, the criteria of a parallelogram, and the properties of a parallelogram.

The Circle picture material included:

(1) Ten slides introducing the terms necessary for the study of circles, such as radii, circumferences, central angle, chord, intercepted arc, inscribed angle, concentric circles and tangents.

(2) Ten slides on circles, equal arcs, chords, and central angles of the same or equal circles.

(3) Five slides on diameters, perpendicular bisectors of chords, and bisectors of arcs of a circle.

(4) Ten slides on tangents, common external tangents, common internal tangents, line of centers, and tangent circles.

(5) Ten slides on loci, perpendicular bisector of a line, bisector of an angle, finding the center of the inscribed circle and the center of the circumscribed circle of a triangle, the altitudes and medians of a triangle.

(6) Fifteen slides on angle measurements, angles formed by two intersecting chords, tangent and a chord, tangent and a secant, inscribed angle and central angle.

Plan of the Experiment

Three sections of Plane Geometry classes were used for the experiment. Lantern slides were extensively used with section one during the first half of the semester, and were not used at all with the third section.

At the end of the first nine weeks the same objective test was given to all sections, covering the work up to the time of the test. The results of each class were tabulated. Near the close of the next nine weeks another objective test was given to all sections and results were tabulated. The per cent of loss or gain of each section was tabulated as well as the arithmetic mean score for each test given. Tabulation of the achievement scores was made in each class using a scale in the translating of the scores so that comparisons could be made. Again, the per cent of loss or gain was noted and the arithmetic mean of the achievement scores of each class was tabulated.

Procedure

These one hundred twenty lantern slides were used in many ways. In introducing a new unit of work, the slides were projected on the black board where the pupil would write with chalk the correct name of the term in question. Slide No. 1 is an example:

During the socialized recitation the pupils were given opportunity to write the names of these terms which were very essential in the study of circles. When parallel lines were introduced, a set of parallel lines with transversals was projected on the blackboard, with angles indicated by letters as in slide 2. The correct names of all the angles were then written by pupils on the blackboard.

b and *e*, *a* and *f*, are Alternate Interior Angles
c and *g*, *d* and *h*, are Alternate Exterior Angles
b and *f*, *a* and *e*, are Consecutive Interior Angles
c and *h*, *d* and *g*, are Consecutive Exterior Angles
a and *g*, *b* and *h*,
d and *e*, *c* and *f*, are Corresponding Angles

Often some of the slides were used in rapid work, stressing crucial geometrical facts. This was especially true with the slides on angle measurement on circles.

Likewise on angles of a triangle. Slide 3 illustrates this:

Angle e = 90°	Angle x = —°
Angle f = —°	Angle s = —°
Angle g = —°	Arc BD = —°
Angle h = —°	Arc AC = —°

Sometimes slides containing exercises summarizing knowledge of certain geometrical facts were projected on the blackboard. A good example of this is shown by slides 4, 5, 6.

The perpendicular bisector of any chord.....

The locus of all points equidistant from A and B .....

AB and CD are common internal tangents. They .....line of.....

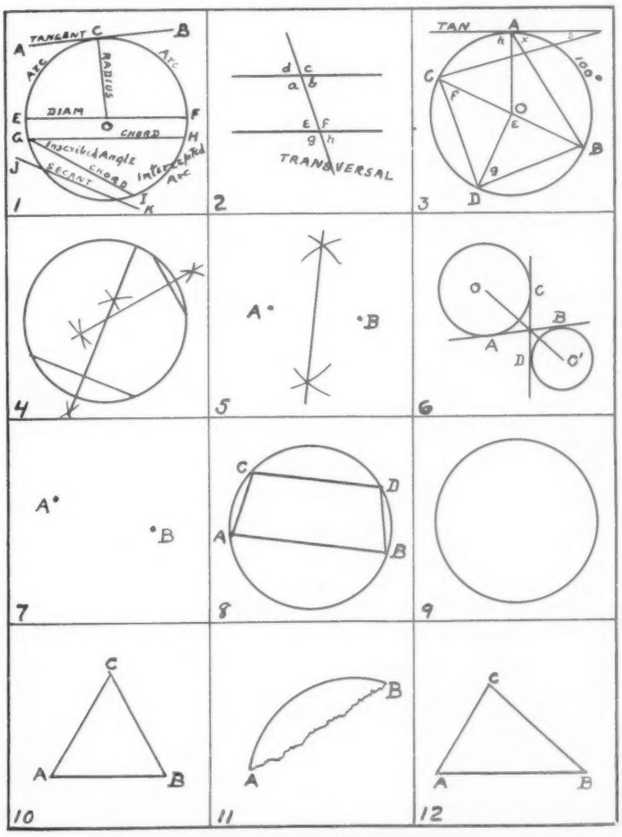
At times some of the slides were projected in the form of drills calling for critical thinking in applying certain geometric knowledge to problem situations. See slides as follows:

7. Some gold is buried 30 yards from A and 20 yards from B. Where would you look for it?

8. AB is parallel to CD. What kind of figure is ABCD?

9. A parallelogram is circumscribed around a circle. What kind of a parallelogram would you have? Find the center of this circle.

10. AB = BC = AC. Find circumcenter, incenter, centroid, ortho center.



Twelve of the Slides Used

The actual tests given and scores may be obtained from N. L. Martin, Seymour, Ind.

Occasionally slides (11, 12) were used in what might be called a miscellaneous manner.

11. Arc AB is a part of a circular glass. How would you cut a glass equivalent to the original circle?

12. How would you draw three lines so that three parallelograms would be formed within the triangle ABC?

Findings

Section one, which used lantern slides the first nine weeks, shows an average score on the first test of 82.2 points. This is 16.02 points higher than the average score of section two, and still higher than the average score of section three (which was to have no slides at all).

The achievement score is found by obtaining the average score of daily class work, frequent quizzes and tests over the complete unit of work covered. Section one had an average of 3.75 points which is just .25 of a point from a "B" average for the class as a whole. During the first nine weeks section two had an achievement score of 2.63 points and section three had an average score of 2.57 points.

During the second nine weeks section two used lantern slides. On the test near the close of the second nine weeks period section two had an average of 70.18 points, section one had 67.6 average and section three had 53.15 points for the average. During the second nine weeks' period section two had an average of 3.00 points, section one had an average of 3.4375 and section three had an average of 2.23 points.

The average Intelligent Quotient of section one was 108.2, section two, 103.4 and section three 104.2.

Section one lost 8.33 per cent during the second nine weeks when lantern slides were not used.

Section two was 14.06 per cent better the second nine weeks (with slides) than the first nine weeks (without slides).

Section three was consistently the lowest section from the standpoint of averages on tests and achievement scores in spite of the fact that this section three had a higher average Intelligent Quotient than section two.

Section two which had the lowest average of Intelligent Quotients made the highest per cent of gain by using the lantern slides.

Section one which has the highest average of I. Q. did not vary, both from the standpoint of tests and achievement scores as section two showed.

(1) The results of this experiment would seem to show that a series of correlated lantern slides will increase the effectiveness of the presentation of Plane Geometry.

(2) The value of the lantern slides appear to vary inversely with the native capacity of the individual child.

(3) The value of lantern slides in the teaching of Plane Geometry shows that there is a high degree of Correlation between achievement and the use of the slides.

The Habit Of Criticizing The Motion Picture

ANNETTE GLICK

IT IS natural that parents and educators should concern themselves more with the social and ethical aspects of motion pictures than with their value as artistic products. Frequently what one accepts as a technical and artistic triumph, one rejects as suitable food for growing boys and girls. It is as if one must view the film with two eyes, each focused separately upon two images, the one being the film as an adult product, subject to the canons by which any good novel or stage play is judged, and the other the film as a juvenile product, with its known powerful means for affecting the thoughts and habits and emotions of the impressionable adolescent.

But while we customarily keep the critical right eye wide open, by which the moral and ethical value of the film is determined to our satisfaction as parents and teachers, we too often keep the left eye, by which the artistic value of the picture is equally measured, tightly closed, or give at best, a brief squint through lazy and drooping eyelids. We let loose fulminations and broadsides on the baleful influence of certain films as social products, but we are unable to give these criticisms weight by an equal ability to point out flaws in the film when judged artistically, and recommend practical palliatives and remedies. It is believed that were we to improve and exercise our critical faculties in the literary and dramatic judgment of the film product, and so demonstrate our ability as critics of both sense and discriminating sensitiveness, our voices, where matters of the essential welfare of boys and girls as effected by motion pictures were concerned, would be heard like the blast of a trumpet, instead of as a feeble bleat.

While, in the judgment of a novel best-seller or currently successful stage play, we can hold our own with the literary critic in determining with fair clarity wherein the product rises to heights of achievement, sinks to depths of inanity, or maintains a fair average, with the typical motion picture, on the other hand, we are at an utter loss even to call up the most rudimentary and workable standards of measurement. This, of course, is the result of the newness of the motion picture as a literary and dramatic medium, and our slowness in investing it with the halo of tradition and lettered dignity.

The principles by which motion pictures are evaluated and perpetuated no doubt will be long years in the making, and it is clear that such motion picture critics as Norbert Lusk and Percy Hammond are even now still regarded as somewhat outside the pale, and hardly to be included in the same category with Richard Burton. Only when a whole family of literary critics of the first water turn Barrymore and desert the stage for the more plebeian screen, will motion picture critics come into their own.

As for its potentiality as an agency for the moral regeneration or degeneration of the world, the baffling and appalling thing is, of course, the all-pervading, far-reaching, limitless range and intensity of the motion picture. Children may read the abstract word symbols of a book, and without powerful imagination, may only feebly reconstruct its scenes, but the motion picture, as has been said so many times, is life itself, stopping short only of actual experience.. It is one thing to discuss with high school students in Chemistry the injurious results of noxious gases; it is another thing actually to have them breathe the poisonous fumes. It is one thing to discuss in a Sociology class the evils of opiates; it is another thing to take the class on a personally conducted tour of the opium dives of Chinatown. The vividness of the motion picture is rendered almost with childlike naiveté; its reality amounts to a vicarious experience. Children who come from a motion picture have lived the scenes portrayed, not merely viewed them.

The motion picture is the living record of an experience, — the printed word is only its palsied and abstract symbolization. As a medium for the transmission of experience, the motion picture is as far above the printed word in range and power and grasp, as the printed word is above the elementary sign language of the Indian. There are many things that thumb and finger cannot say; there are some things that even words are inadequate to express; there are few emotions that may not be conveyed by the rich, revealing representation of moving imagery.

It is clear that all knowledge began with the attempt to fix thought and transmit it from generation to generation. Painting and sculpture, as well as writing, were part of an impelling desire to perpetuate and fix an emotion or thought or feeling. Even with us today, the simplest thought has nearly always its concomitant in the instinctive impulse to **express** it,—to transmit it to others. Some way, by the simple verbal act of mouthing the thought, articulating it, it seems as if we had written some sort of record in the air. And some day in the future, when the mystery of radio shall

have been extended, we shall find, indeed, that all these spoken words through past centuries, have their undying record, and we shall call up lost sounds and forgotten utterances. Of our words, written eternally in the ether, we may say as Christ did of Lazarus, "He is not dead, but sleepeth." If all our spoken words are recorded, they will be infinite. As a race, we are at the antipodes from the Hindoo who is content to sit, leaning upon his T-square arm rest, in introspective and philosophic contemplation!

To the poet or philosopher, before whose dreaming eye the world unfolds, words are cryingly inadequate things. In the expression of his most exalted conceptions, he must stop to deal, pitifully and lamely, with the hopeless jugglery of words.

Though words are inadequate media for the expression of abstract thought, the silent motion picture is little better, (due to its restriction to pictorial imagery). Talking pictures, on the other hand, are vastly more effective for transmission of complete thought than the silent screen, adding as they do the symbolism of words to concrete and graphic pictorial representation. And the talking motion picture comes nearer to gathering within its fold **all** forms of thought conception than any other medium for the expression of thought and feeling, uniting as it does painting with sculpture, sculpture with music, music with drama, and poetry and literature with all these.

Though there have been, it is true, Leonardo da Vincis and Michelangelos who thought as well in terms of architecture and sculpture or painting, and expressed themselves with as much facility and genius in any one or all, the trend of art expression has tended to place the varied art forms in separate compartments with clearly defined barriers between. It would have been considered a major phenomenon had Beethoven as instinctively turned to an expression of his rhythm and harmony through the medium of chiseled marble or etched line. There is no doubt but that sculpture can best portray form and roundness; painting, color and shadow; music, melody and harmony; but words may include all these, and through the magic of imagination, portray symbolically all the complexities of life and thought, in endless ramifications and interlacings. All these are the province of the pen.

Through the imagination as stimulated and aroused by words, one may hear again Beethoven's Kreutzer Sonata or see again the rampant color harmonies of Turner or Sargent. All the fine arts are within the realm of the writer, but the palette upon which he spreads his colors, the spinet upon which he plays his song, is the sensitive, imaginative power of the reader. Sometimes his superb imagery, his exalted melodies, fall upon dead ears. Because we lack life experience and creative imagination ourselves, we are a diaphragm which will not vibrate to sound received, or a harp string which cannot be plucked. The poet's words mean nothing, and the musician's dying cry becomes only noise.

It is through this power to supply experience as well as simply to convey ideas and thoughts and emotions, that the motion picture accomplishes what the poet or sculptor or musician cannot do. As has been said repeatedly, the motion picture does not merely stimulate the imagination and arouse thought,—it supplies that very experience which is at the basis of thought. And this fountain-head of experience has at its command all the arts, freed of their restrictions of time and place, with the world and even the stellar spaces for their province.

Far exceeding the pen in potency and range, is the motion picture, for to the abstract symbolism of words with all their power to express emotions, impulses, and meanings, will some day soon be added the symbolism of painting, and sculpture, as music has already been enlisted to make up the harmonious whole. In the newer period of mechanical improvement, when stereoscopic photography,—to supply form and roundness as in sculpture—and color and musical recording shall have been perfected, when even there is a "Theater of Odor Melodies" where odor shall take its rightful place as one of the senses utilized by art for significant and realistic expression, in this period just ahead, the motion picture will combine all art forms in one superb whole, just as Phidias so hopefully painted his marble figures to give them the glow of health and life, and Ghiberti in the doors of the Baptistery at Florence, caused his bronze paintings to stand erect.

In the speed with which these very mechanical improvements are being made, lies the evanescent, transitory character of the motion picture. These same mechanical improvements affected the book in its effort to record thought, from the early days when prehistoric man heaved up his pile of stones as a record of some act successfully accomplished, through the days of the perfection of papyrus, the wax tabulae of the Romans, parchment, pen, and paper, down to the modern clattering linotype and rotary printing press. While these mechanical changes in verbal recording took place over centuries and millenniums, with the motion picture this same range of mechanical perfection and accomplishment has been a matter of years and decades. And just as our modern age would chafe at reading Oppenheim or G. B. S. on frayed and crackling papyrus, so our modern 1933 hoots at the vintage of 1923 as expressed in antiquated motion pictures. So fast do we move, as a result of our Yankee ingenuity and driving energy, that the mechanical progress of a year becomes as a century.

The curious fact is that in no other form of art expression does the mechanical medium so clearly determine the nature of the art expression as in the motion picture. The music of Schubert is still Schubert whether played on a spinet or via radio; Shakespeare's plays are still enjoyed in the primitive manner with no stage props at all, and a sign reading, "This is the forest of Arden", supplies the missing scenery. Socrates might scratch with crooked stick his words in the sand, and all the world would still read. Some of the greatest painted etchings of all time were scratched on the walls of Altimira by Cro-Magnon artists, and we still stand sunken in wonderment before them, thrilling as much to the taut muscles and plunging hulks of the great prehistoric animals as to the intimate beasts of Landseer or Rosa Bonheur accomplished with modern canvas and colors.

While the mechanical form in which a great piece of literature is cast has little to do with its status as a great work of art, and we thrill just as much to Vergil on vellum as set in the type of the Kelmscott press, with the motion picture we are heartlessly aware of every bolt or screw as expressed in mechanical improvement. It is as if once a jack-knife revolving stage were produced to overcome the mechanical difficulties of the stage presentation of *Grand Hotel,* we were ever after that to demand revolving stages, and never be content to view a stage play produced in the old manner. Or were moving belts to be introduced by which, as in *Green Pastures,* God was enabled to walk abroad on the land, we would thereupon demand "blood and games" in the form of more moving belts and better and bigger ones, and never again view a stageplay except as a revival, in the old manner.

There is a great difference, however, between the stage and books and the motion picture as literary and dramatic recording instruments. In the former, the mechanical medium is rather an accessory than a determinant in the expression of thought. But mechanics in motion pictures obtrude constantly as determinatives and dominants. The particular form of sculptor's chisel has not as determining an effect upon his art as has the lens upon the work of the camera artist. A Stradivarius violin is as prefect a recording instrument today as it was in 1700, but mechanical changes and improvements in the motion pictures are of diurnal occurrence. And the motion picture artist finds himself confined by the tools of expression which the mechanic and scientist put into his hands. He no sooner accustoms himself to the speed of silent imagery, than sound is introduced,—no sooner to this than third dimensional photography is complete, or double exposure, or color. It is as if the musician one day held a jew's-harp to his lips, and the next day looked wonderingly down upon a piano.

It is easy to talk of the need for arriving at standards of accomplishment by which to measure the achievements of the motion picture, but the truth is that we will never have a true evaluation of the artistic contribution of the motion picture until the mechanical medium is more or less stabilized, and until we can look at the work apart from our Yankee consciousness of bolts and screws and links and couplers.

In no other art form is the determining influence of the mechanical medium so complicated or tyrannical. Nor, as is well known, does it include in any other art form so many varied elements. The painter who once masters the technique of mixing his colors, may follow his own dreams from that time forward, as may the musician when he has mastered the mysteries of his ivory keys or singing strings. But the complications of the mechanical manipulation and recording of the motion picture are so great that all the king's horses and all the king's men can scarcely put Humpty-Dumpty together again. Were a hundred men to be required to manipulate and hold the strings of the violinist's instrument while he played, these would compare to the army of technicians required to produce the motion picture.

The simplest definition of art seems to be the one given by Lord Leighton, "Art is based on the desire to express, and the power to kindle in others, emotions astir in the artist and latent in those to whom he addresses himself." When analyzed, the steps seem to be (1) the experiencing of an emotion, (2) the expression of the emotion (3) the ability to cause others to experience the emotion, also.

The sad thing with regard to the art of the motion picture is this: that, due to the mechanical awareness and sophistication of the public, and the degree to which they pass judgment upon the art value of a production measured by its technical perfection and corporeal housing, the artist who experiences a lofty thought or conceives of a beautiful meaning, is blocked and circumscribed in his impulses to make the other person see what he sees, hear what he hears, feel what he feels, by the height of the piano, the length of the strings, and the candle-power of the spotlight cast upon it.

When once the mechanics of motion picture production become stabilized and fixed, when technical improvements come with less swiftness, when the Stradivarius becomes the standard medium over centuries of time, then the motion picture artist will be judged by his work and not by its mechanical trappings.

Contributors to this Issue

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Visual Aids and the Economic Situation*

A. J. STODDARD

THE USE of visual aids to teaching can be justified from at least two standpoints. They may make the educational process more effective or they may make possible the same results at less cost. Either result would justify a continued and possibly an expanding interest in visual aids even in times of grave economic stringency such as exist at present in most school systems.

Visual aids are not new to the classroom. In one form or another, they are almost as old as teaching itself. In fact, they were probably a more important part of the teaching process before printing and textbooks were available. The full potentialities of visual aids have not been realized in most cases because of certain unsolved problems involved in their use. The problems have been unsolved largely because teachers and administrators have failed to realize fully the importance of the technical or mechanical side of the device. They have not made the aid a ready servant in the teaching process. Dust-laden models, exhibits, stereopticons, and projects bear mute witness to this fact. The radio is the latest illustration of a very valuable device whose educational possibilities have not been fully realized because of unsolved technical problems incident to its use.

The coming of slide projection and motion pictures brought a degree of reality into the classroom that had not been possible before. The talking picture or sound film has extended the influence of these devices and, by making the teaching appeal simultaneously to the eye and the ear, has made it possible to bring the actual outside world into the classroom. From one standpoint, it makes possible an improvement upon "experience as a teacher" in that the teaching situation can be controlled and repeated without variation as to educational value. The almost unlimited possibilities of the talking picture as a factor in education, if properly planned and constructed, are described clearly and forcefully in a new book just off the press. I refer to "The Educational Talking Picture" by Colonel F. L. Devereux, and published by the Chicago University Press.

It is not the function of this brief paper to describe the possibilities of educational talking pictures. Suffice to say that enough has already been demonstrated concerning the effectiveness of this device to justify the prediction that it may do more to enrich and vitalize teaching than any other contribution made to teaching since the introduction of textbooks. From the standpoint of increasing the effectiveness of the teaching process, the educational talking picture becomes an important phase of the question of school economies.

But there is another possibility of the educational talking picture as an economic factor that is of great significance to the educator. That is its relationship to the question of class size. What determines how large a class can be taught effectively? Leaving out the element of the teacher, it is very largely a question of devices. There are many types of teaching where the participation on the part of the learner is mental and emotional rather than primarily physical.

In such teaching three steps should be included: the preparation, the presentation of the learning situation, and the follow-up to individualize the outcomes desired. It may be possible to include large numbers of learners at one time in the second step of the process. For instance, recently in a city system of schools, a very clever art teacher broadcast over the radio a lesson of art appreciation. The children were prepared for the message by certain study beforehand. This was done in regular classes. At the time of the broadcast each child had in his possession reproductions and pictures of what was being discussed in the radio message. After the broadcast, each class carried out the third step with their own teacher. The broadcast itself was made to a class of more than ten thousand children at one time. The possibilities in the use of radio in teaching have not yet been realized very generally.

The illustration of the radio lesson may be carried over to the use of talking pictures. It would seem that in the use of many types of subjects for educational purposes, the only limit in the size of the class during the second step in the process would be a mechanical one concerned with size and arrangement of room, seeing the picture, and hearing the sound.

An experiment has recently been conducted in the schools of Providence that draws interesting evidence on the question of increasing class size through the use of educational talking pictures as a medium of instruction. Nearly fourteen hundred pupils in grade

(*Concluded on page* 20)

*Address given before the Department of Visual Instruction of N. E. A. at Chicago, July 5, 1933.

DEPARTMENT OF VISUAL INSTRUCTION NOTES

CONDUCTED BY ELLSWORTH C. DENT, SECRETARY

Program of Department of Visual Instruction National Education Association

Winter Meeting at the Carter Hotel, Cleveland, February 26 and 27, 1934

Monday, February 26

1:00 P. M.—Luncheon Meeting (Ball Room of the Carter Hotel)

"16 mm. Sound Films for Schools"—Dr. V. C. Arnspiger, Director of Research, Erpi Picture Consultants.

2:15 P. M.—Afternoon Session

Motion Pictures and Youth

"The Educational Influence of Motion Pictures upon Children and Youth"—Dr. W. W. Charters, Director of Research, Ohio State University.

"A Comprehensive Program for the Teaching of Motion Picture Appreciation"—Dr. Edgar Dale, Bureau of Educational Research, Ohio State University.

"California's Program in Visual Instruction"—Dr. Vierling Kersey, State Superintendent of Education, Sacramento, California.

"Popularizing Critical Appreciation of Photoplays Among Adolescents"—Dr. William R. Lewin, Chairman, Committee on Photoplay Appreciation, National Council of Teachers of English.

(Brief Business Meeting)

Tuesday, February 27

Morning Session

10:00 A. M.—Visit to the Robert Fulton School as a Visual and Radio Center.

1:00 P. M.—Luncheon Meeting (Ball Room of the Carter Hotel).

2:15 P. M.—Afternoon Session.

Visual Instruction and the New Education.

"An Overview of Visual Instruction in the United States"—Wm. Dow Boutwell, Editor-in-Chief, Office of Education, Washington, D. C.

"A Preview of the Rome Meeting"—Dr. C. F. Hoban, Director of Visual Education and the State Museum, State Department of Public Instruction, Harrisburg, Pa.

"Cleveland's Program and the New Education"—Dr. Wm. M. Gregory, Director, Cleveland Educational Museum.

Inspection of the Educational Museum under Dr. Gregory's guidance.

A visit to the Cleveland Educational Museum, regardless of other features of the program, would be ample return for the cost of attending the meeting. It contains one of the most complete arrays of objective teaching material in the United States and provides a most excellent service to the schools of Cleveland. A trip through the Museum, escorted and explained by Dr. Gregory, will be a revelation to those who have not been privileged to make such a visit. The many new features of the service will be of great interest to those who may have visited the Museum earlier.

The recent developments and plans for future activity in the adaptation of the motion picture to educational purposes will be discussed ably by Drs. Arnspiger, Charters, Dale and Lewin. Dr. Kersey's discussion of the visual instruction program of California should be of interest to everyone, particularly those who have not had an opportunity to contact some of the most active visual instruction departments in that state which ranks so high educationally.

The increasing interest and activity of the Office of Education in the visual instruction field will be evidenced by Mr. Boutwell's discussion, as well as by the report of Dr. Hoban concerning plans for the meeting of the International Congress of Educational Cinematography, to be held in Rome. Both discussions should be of paramount interest to regular users of visual aids, as well as to those who merely desire to keep abreast of modern trends in education.

MAKE RESERVATIONS EARLY

Reservations for rooms should be made directly with the Carter Hotel, Cleveland, Ohio, as promptly as possible.

Reservations for the luncheon meetings of the Department of Visual Instruction should be mailed directly to the office of the Secretary, 1638 Illinois Street, Lawrence, Kansas. It is important that reservations for the Monday luncheon be made well in advance of the dates for the meeting. It is necessary to know the approximate number to be present, in order that the Carter Hotel may make arrangements accordingly. If reservations are not made in advance, some who come may be inconvenienced, although an attempt will be made to take care of everyone.

New Jersey Visual Education Association Meets

In connection with the New Jersey State Teachers' Association meeting, held at Atlantic City recently, the New Jersey Visual Education Association gave a program which was shared with New Jersey Association Teachers of Social Studies and New Jersey Council of Geography Teachers. The meeting was held at Haddon Hall and was well attended.

The program consisted of an illustrated lecture entitled, "Geographical Factors in American History," by Dr. John K. Wright, editor, Atlas of the Historical Geography of the United States, New York City; an address, "Visual Aids in the Social Studies," by Erna Grassmuck, State Teachers' College, Indiana, Pa.

The president, Louis J. Kaser, superintendent of schools, Burlington County, presided. W. B. Somerville, supervising principal at Neptune City, was elected president and Albert M. Leeds, supervising principal, Franklin Township, Gloucester County, treasurer.

In connection with the meeting, a testimonial breakfast was held at the Hotel Madison in honor of A. G. Balcom, assistant superintendent of schools in Newark, N. J. At this meeting the speakers were Lawrence R. Winchell, former president of the association and supervising principal at New Providence, N. J., and a teacher of visual education at Rutgers University; Roy R. Zimmerman, principal of the junior high school at Englewood and a former president of the association; Earl B. Tuttle of the Eastman Teaching Films, and Miss F. Winifred Crawford, director of visual education, Montclair, N. J.

Visual Instruction Section Meeting Texas State Teachers Association

Chairman: Mrs. Charles Joe Moore, Chief, Visual Instruction Bureau, The University of Texas, Austin.

Place of Meeting: Physics Bldg., Austin.

Time of Meeting: Friday, December 1, 1933, 9:30 A. M.

9:30 "How and When Visual Aids Should Be Used in the Classroom and How This Can Be Managed in an Auditorium"—Miss Lucille Morgan, Principal, Tyler Ward School, Belton.

9:40 "City Circuit"—Miss Mary Ethyl Walter, Public Schools, Dallas.

9:50 "The Motion Picture, a Social Influence in the School"—Mr. J. F. Howard, Supt., Alamo Heights School, San Antonio.

Joint meeting with Science Section and History Section

10:00 "How to Plan a Semester Chemistry Course, Using Visual Aids"—Dr. J. C. Godbey, Southwestern University, Georgetown.

10:10 "Showing of University of Chicago motion picture, *Molecular Theory of Matter.*"

10:25 "Financing the Yale Chronicles Photoplays"—Mr. L. C. Proctor, Supt. of Schools, Temple.

10:35 Motion Picture (1 reel of Yale *Chronicles*).

10:50 "Are the Schools Utilizing the Material Texas Has Prepared for Them?"—Mr. L. A. Woods, State Superintendent of Schools, Austin.

11:10 "The Material the Visual Instruction Bureau Offers"—Mr. T. H. Shelby, Dean, Extension Division, The University of Texas, Austin.

11:30 General discussion of above program.

Afternoon Session

Chemistry Building Auditorium, 3:30 P. M.

Joint meeting with Classical Language and English Sections.

3:30 Illustrated lecture, "The Birds of the Greeks and Romans"—Dr. W. J. Battle, The University of Texas, Austin.

Department Membership

Membership in the Department of Visual Instruction of the National Education Association is open to anyone who may be interested in the application of visual-sensory aids to educational procedure. This would include teachers, school executives, members of boards of education, members and officials of parent-teacher associations, members and officials of various public and private service agencies, ministers, Sunday school workers, travelers, photographers, and any others who may be interested. Active membership is limited to those who are members of the N. E. A., but associate membership is available to anyone, including all services except the privilege of participation in the business affairs of the Department.

The annual cost of membership is but $2.00, including a subscription to the Educational Screen and other services which would cost more than twice the membership fee if secured by those who are not members. If you are not a member, you are failing to identify yourself with the most progressive movement in the field of education. The acompanying blank is provided for your convenience. Use it!

Membership Application Blank

Secretary, Department of Visual Education,
National Education Association,
1638 Illinois Street,
Lawrence, Kansas.

Date.....

I herewith make application for membership in the Department of Visual Instruction of the N. E. A., for a period of one year at the usual fee of $2.00, which I am enclosing. (Payment may be deferred if desirable.)

My membership card, the 1933 Visual Instruction Directory, and *The Educational Screen* should be mailed to—

Name .....

Address .....

City and State.....

I am ☐ } a member of the
I am not ☐ } National Education Association

Note: Please make remittances payable to the Department of Visual Instruction.

NEWS AND NOTES

CONDUCTED BY JOSEPHINE HOFFMAN

Lectures on Motion Pictures in Art Education

Mr. Elias Katz, M. S., has done much constructive work in the field of motion pictures as related to Art Education. He became interested in this field while doing graduate work at the College of the City of New York and is now lecturing on the subject. On November 21 he delivered an illustrated lecture before the School of Fine and Applied Arts of Pratt Institute, Brooklyn, on "The Preparation of Visual Aids in Art Education." On January 10, he spoke on "Previous Efforts in Art Educational Films" at Teachers College, New York City, and plans to present illustrated lectures every Wednesday afternoon on "Types of Films Which Can and Should Be Used" at Teachers College.

Mr. Katz has compiled a bibliography on the literature, catalogs and actual films relating directly to this special field in connection with his Master's thesis on the "Educational Possibilities of Motion Picture Films in Art Courses."

Visual Aids for Health Education

Duplicator series of memoranda on lantern slides and motion pictures have been compiled by Mr. Evart Routzahn of the Russell Sage Foundation, New York City, with a view to furnishing health and welfare agencies particularly with information on such visual aids. However, many of the suggestions contained therein should prove helpful to visual workers in other fields as well.

The memorandum on "Making Lantern Slides" stresses the importance of the correct use of slides and the use of the right kind of slides. It also calls attention to the increased use of teacher-made and pupil-made slides with the extension of visual aids in schools, and lists available pamphlets which describe various methods of making slide forms. Supplementary information is given on film slides and stillfilms. A copy of this memorandum can be secured for 6 cents from the Social Work Publicity Council, 130 E. 22nd St., New York City.

A memorandum on "Motion Pictures," including directories of film sources, can be obtained for 3 cents a copy. Titles of other memoranda and pamphlets on publicity methods and projects supplied by the Social Work Council are: "A Partial List of Amateur Movies"—amateur pictures known to have been made on health and welfare subjects (3 cents), "Health Motion Pictures" — addresses for securing pictures for adult health education, school health instruction, or medical groups (3 cents), and "Amateur Movies"—how to get free information about making them (6 cents).

English Teachers Sponsor Film Courses

That units of instruction be introduced into the nation's schools, with a view to improving popular standards and tastes in motion pictures, was the recommendation of the Committee on Photoplay Appreciation of the National Council of Teachers at a recent meeting of that group.

This recommendation is based on the results of the experiments started more than two years ago by William Lewin, chairman of the Committee on Photoplay Appreciation, which show that classroom teaching has enabled high school boys and girls to discriminate among pictures and choose the better productions. The experiments were conducted with two groups of students in each school, one receiving instruction and the other not. In all, 36 teachers, 1,851 pupils, 31 schools and 28 cities were considered statistically. It was found that the experimental group were 41% closer to the standard set up by the teachers.

The Council is preparing a series of lesson texts on various motion pictures. These texts are being sent to the heads of English departments in some 17,000 high schools. The lessons are divided into two sections, one to be used before seeing the film; the second to test the reaction of the students after witnessing the picture.

The guide for use before seeing *Little Women*, for example, includes such questions as: "Would you expect a screen adaptation of the book to have a powerful plot, much suspense, great excitement?" "What incidents in the book would you like to see 'come alive' on the screen?" "What should you say is the main theme of the book?"

Among the questions asked for the second section of the lesson are the following: "Did you like the motion picture adapted from the book?" "Where should you say the introduction ended and the play began?" "Did you think the details in the settings were correct as to time and place?" "What were the 'high points' in the screen play?"

FILM PRODUCTION ACTIVITIES

The aim of this new department is to keep the educational field intimately acquainted with the increasing number of film productions especially suitable for use in the school and church field.

New Company Formed for 16mm Film Distribution

Arnco Films Incorporated, New York City, has been organized to handle the distribution of film and the reduction of 35mm. sound-on-film subjects to 16mm. sound-on-film subjects.

They now have ready for release, a three reel picture entitled *Evolution*, which was made under the supervision of the Museum of Natural History. The picture contains great educational value—showing, in animation and actual shots, a varied sequence of events leading up to the formation of the earth and the birth of animal matter. The creation of the world, based on many scientific theories, is depicted, followed by the formation of mountain, river and prehistoric animal forms and lastly the development of man. Models of prehistoric monsters and other material were furnished by the American Museum of Natural History, and live animal shots were done with the cooperation of Dr. Raymond Ditmars ot the New York Zoological Gardens.

Zane Grey's *South Sea Adventures* has also been released in 16 mm. sound-on-film. It is a compilation of scenes of a fishing expedition to the South Seas, produced and directed by the author who himself appears in much of the thrilling action. Additional productions planned for early release include a three-reel feature *Wings Over the Andes*, and a six-reel feature, *Savage Gold*, an outstanding film-travel chronicle of Commander George Dyott's thrilling Ecuador expedition.

A group of one reel subjects, termed *Conflicts of Nature*, will be released at the rate of one every two weeks beginning this month. The first of this series is titled *Her Majesty the Queen Bee*, which will be followed by: *Queen of the Underworld, From Cocoon to Butterfly, Insect Clowns, The Farmer's Friend*, and *Circle of Life of the Ant*.

Castle Films Extends Service

A wider distribution of talking business motion pictures, used primarily for showings to salesmen and dealers, is now possible with the establishment of a new service by Castle Films. Making it unnecessary for a film-using advertiser to buy sound-on-film projectors for showings of motion pictures, the new service provides machines and operators for showings in any city or town in the United States.

With offices in the east, the middle west and on the coast, Castle Films can on short notice provide projecting facilities at small expense.

Chicago Academy of Sciences to Make Movies in South

F. R. Dickinson, vice-president, and Alfred M. Bailey, director, of the Chicago Academy of Science, will soon embark on a photographic expedition to the Vermillion Parish, Louisiana, along the Gulf of Mexico, to make motion films of the ducks and geese of that region for the film library of the Chicago Academy of Sciences. With the cooperation of the National Audubon Society, they will make film records of the thousands of ducks and geese wintering on the Paul Rainey Bird Sanctuary. Hordes of blue geese winter in that vicinity and unusual photographs are expected.

According to information from Bell and Howell, for the past five years the Academy has been building a film library of the animal and plant life of North America, and over 50,000 feet of negative have been secured. Field trips have covered regions ranging from the summits of the Colorado Rockies to Labrador, and from Canada to the Gulf of Mexico.

Travel Subjects

Throne of the Gods depicts the actual ascent of one of the highest peaks of the Himalayas by Dr. Dyhrenfurth, the noted explorer. Lowell Thomas renders the accompanying narrative. Preliminary to the actual scenes of the ascent, the picture shows scenes here and there en route to the base of operation—Bombay, Calcutta, Delhi, the Ganges, the Suez Canal. Interesting is the material concerning the natives on the bleak steppes of Tibet, with intimate views of the famous Tibetan monks with their strange customs and wild ceremonial dances.

Dassan is an entertaining subject, having considerable novelty and humor in it. It is devoted entirely to the activities of the penguin inhabitants of an island somewhere off the coast of Africa, and presents many amusing views of the lives of these creatures.

Both of these productions are distributed by First Division.

Outposts of France, one of the Fox Magic Carpet series, pictures the coast line of Indo China together with views of the people and of life in Cambodia. There are some exceptionally fine views of Angkhor, the greatest mystery of Indo-China, and its ruins of a highly developed people. Other recent releases in this series are titled, *Birds of the Sea, Home Life of the Danes, The Island of Malta* and *Playground of Pan*, presenting scenes on the Island of Rhodes.

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Estimates are given for 3 groups
A—Intelligent Adult
Y—Youth (15-20 years)
C—Child (under 15 years)
Bold face type means "recommended"

Alice in Wonderland (Charlotte Henry and Star Cast) (Paramount) Honest, elaborate, costly attempt at film expressly for family. Deserves support, but unfortunately it is too heavy, literal, artificial, cumbrous, complex and grotesque. Some day "Alice" will be made light, imaginative, whimsical, dream-like—and will "pay handsomely."
A—Disappointing Y—**Good** C—**Good**

By Candlelight (Elissa Landi, Paul Lukas) (Universal) Deft, sophisticated farce distinguished by able direction, glamorous settings, smooth acting. Plot concerns the masquerading of a butler as a prince. Admiring his philandering master's success with women he seeks to emulate him with amusing complications.
A—**Entertaining** Y—Doubtful C—Not for them

Chance at Heaven (Ginger Rogers, Joel McCrea) (RKO) Light, simple, little romance of filling-station hero in country village, and fine little heroine, his village sweetheart, who waits sportingly until his marriage with dazzling heiress wears out. Ordinary acting, elementary story but mostly engaging.
A—Thin but pleasant. Y—**Good**
C—Probably good

Christopher Bean (Marie Dressler, Lionel Barrymore) (MGM) Excellent screening of stage play, brilliantly acted, with Dressler superb in ideal role. Dead artist's paintings are unappreciated in humble home of country doctor until they become suddenly valuable. Excitement begins with Dressler in the center of it.
A—**Excellent** Y—**Excellent** C—**Good**

Convention City (Joan Blondell, Frank McHugh) (First Natl.) Fast, hilarious burlesque, depicting commercial salesmen's convention as mere orgy of booze and women, when salesmen's wives should be dodged or forgotten. Company business becomes joke. Not a wholesome character in the piece. Anything to get laughs. There are many.
A—Amusing of kind. Y—Pernicious C—No

Counsellor-at-Law (John Barrymore) (Universal) Barrymore gets full value out of sensational role as high-grade shyster lawyer, risen from the slums, self made, unscrupulous, fattening on divorces of the rich, and losing his adored wife thereby. Fast, tense, and rich in character interest.
A—**Entertaining** Y—Mature C—Beyond them

Cradle Song (Dorothea Wieck, Guy Standing) (Paramount) Placid, somber picture, beautifully done, of religious life in Spanish convent, disturbed only by baby girl foundling. Grown-up, she marries and tears heart of nun who mothered her. Too subtle, serene and poignant for popular success. Utterly charming of kind.
A—**Fine of kind** Y—Doubtful appeal but good
C—No interest

Dance, Girl, Dance (Evalyn Knapp, Alan Dinehart) (Chesterfield) Rather dreary "stage life" stuff about married couple of vaudeville ham actors who separate. She goes to Broadway, gets chorus job without merit through friends, resists dishonorable proposals, refuses honorable ones, has child, and gets worthless husband back.
A—Mediocre Y—No C—No

Design for Living (Miriam Hopkins, Frederic March, Gary Cooper) (Paramount) Cleverly written, deftly directed, skilfully acted, extremely sophisticated comedy. Heroine lives intimately with two artist heroes in succession. Jealousy. She then marries boresomely moral business-man but leaves him to resume life with two heroes in unison. For "moderns," marriage is the only impropriety.
A—Depends on taste Y—Pernicious C—No

Duck Soup (Marx Brothers) (Paramount) Usual Marx Brothers idiotic farce-comedy, with crazy horseplay, slapstick, wisecracks, hokum made still more incongruous because set against lavish background of mythical-kingdom royalty. All stock devices retained. Rather less vulgar than usual. Unlimited laughs for all who like "low comedy" at its lowest.
A—Depends on taste Y—Good of kind
C—Funny

Easy to Love (Genevieve Tobin, Adolphe Menjou) (Warner) Assorted liaisons of four people, two married, with Menjou as chief Lotharic ducking in and out of closets and bathrooms, and the young daughter fully matches her parents in sophistication. Artificial and obvious sex exploitation using all standard devices. Feeble stuff.
A—Feeble of kind Y—Unwholesome C—No

Flaming Gold (Bill Boyd, Mae Clark) (RKO) Aside from vivid shots of Mexican oil fields, nothing worth mention in these crude affairs of two tough pals, and a Broadway cabaret entertainer one of them brings down for marriage and trouble. Happy ending, however, if you care.
A—Mediocre Y—No C—No

Flying Down to Rio (Dolores del Rio) (RKO) Gay, glamorous musical comedy laid in Miami, the air, and Rio. Much snap, thrill and originality in music and dance numbers. Heavily spiced with sensuality and risque dialog. Some of the dancing extremely suggestive or vulgar. Clever but brazen production.
A—Good of kind Y—Pernicious C—No

Going Hollywood (Marian Davies, Bing Crosby) (MGM) Another in the current "epidemic" of musical comedy films with lavish background of singing and dancing specialties. Slender, humorous plot concerns pursuit of crooner by virtuous heroine and serves mainly to exploit Crosby's singing. Some clever impersonations interpolated into plot.
A—Good of kind Y—Perhaps C—No

Goodbye Love (Charles Ruggles, Veree Teasdale) (RKO) Inexpressibly cheap concoction about easy divorce and the alimony racket which not even Ruggles' deft comedy touch keeps from being pretty thoroughly disgusting throughout. Much suggestive dialog and cheap actions by mostly cheap people.
A—Trash Y—By no means C—No

House on 56th Street, The (Kay Francis) (Warner) Starts as real, charming character play about 1905 chorus girl who wins fine young millionaire, and new house. Then hectic melodrama, with suicide, murder, jail term, and by 1925 heroine is professional card-sharp, finally fleecing own daughter in same "new house."
A—Depends on taste Y—Doubtful C—No

In the Money (Lois Wilson) (Invincible) Supposedly a realistic domestic comedy of an absent-minded professor and his half-orphaned children mothered by the oldest daughter. So crudely written and directed, so amateurishly acted, that it is too inane to be called entertainment. Harmless and futile.
A—Stupid Y—Dull C—No

Lady Killer (James Cagney, Mae Clarke) (Warner) Usual Cagney stuff — hardboiled, wisecracking, smart-aleck tough guy — very tough. Now drags his mistress by the hair instead of the "sock on the jaw." From tough crook he rises to movie-star, rolling in wealth. Fast, lively, and absorbing of kind.
A—Depends on taste Y—Better not C—No

Man's Castle (Spencer Tracy, Loretta Young) (Columbia) Hardboiled loafer hero picks up sensitive heroine from park bench and they live together in the city dump. He bullies, mauls, torments, and jaws at her in gutter English—which leads to great love, a child, and finally marriage. Glorifies common cruelty.
A—Mediocre Y—Trash C—No

Midshipman Jack (Bruce Cabot, Betty Furness) (RKO) Sincere and convincing portrayal of cadet life at the Annapolis Naval Academy, genuine in setting, depicting the spirit of loyalty and discipline developed there. The story, altho not original, is wholesome and inspiring. Pleasing little romance.
A—Pleasant Y—**Good** C—**Good**

Mr. Skitch (Will Rogers, Zasu Pitts) (Fox) Rogers in typical, homely, human role. Loses Missouri village home and heads west with family in car. Serio-comic adventures in Yellowstone and tourist camps, with Will's philosophy throughout. Thoroughly wholesome despite his momentary fling at drinking and gambling.
A—**Good** Y—**Very good** C—**Good**

My Lips Betray (Lilian Harvey, John Boles) (Fox) Thin, elementary, mythical kingdom comedy about music-hall heroine thriving as mythical mistress of king. Slightly risque touches in lines and situations, probably innocuous because of convincing innocence of heroine. Dialog banal, comedy naive, acting ordinary.
A—Mediocre Y—Hardly C—No

Police Car 17 (Tim McCoy, Evalyn Knapp) (Columbia) Exciting thriller on radio-car police activities, in which the policeman is the hero — not the gangster! This wholesome feature rather lifts the film above ordinary crime-thrillers. Will tend to produce wholesome attitude and reaction in audience.
A—Fair Y—Good of kind C—Good but exciting

Prizefighter and the Lady, The (Walter Huston, Max Baer, Myrna Loy) (MGM) Fast, lively story built on prizefighters, their friends, rivals, and women. Ring atmosphere at its utmost, with Dempsey, Carnera, Baer personally in the cast. Heavy ring fighting, heavy dialog, heavy romance. Nothing better for those who want fight pictures.
A—Depends on taste Y—Not the best
C—Doubtful

Roman Scandals (Eddie Cantor, Gloria Stuart) (U. A.) Cantor, transported in a dream to various misadventures in ancient Rome, is still himself, working industriously for the laughs. The picture is all Cantor, plus chorus girls and spectacular settings in the best movie style. Some suggestive dialog.
A—Fairly entertaining Y—Unsuitable C—No

Should Ladies Behave (Alice Brady, Lionel Barrymore) (MGM) Stupid title for patchwork of odds and ends signifying little or nothing. Alice again as blundering simpleton, always talking. She and her young daughter both in love with same middle-aged poseur. Lionel as ancient, crotchety husband equally unappealing.
A—Worthless Y—Better not C—No

Sitting Pretty (Jack Oakie, Ginger Rogers) (Paramount) Mediocre stuff about two painful "song-writers crashing to success in the movies." Much acting without ability, singing without voice, and comedy effort without spark. Only redeeming feature, some striking stage dance numbers and one real song hit.
A—Feeble Y—Harmless C—Doubtful interest

Solitaire Man, The (Herbert Marshall, May Robson) (MGM) Fairly entertaining detective murder mystery centering around theft of necklace. Marshall good as well-bred jewel thief who decides to retire and become country gentleman. Little action but good suspense. Rather questionable ethics involved in solution.
A—Fair Y—Doubtful C—Little interest

Son of a Sailor (Joe E. Brown) (First National) Good nonsense comedy of navy life, with considerable character interest to keep Joe Brown's antics from becoming monotonous. Fun is continuous and cumulative throughout. One bit of usual gratuitous bad taste at beginning, but otherwise wholesome.
A—Good of kind Y—**Amusing** C—**Amusing**

Thundering Herd, The (Scott, Crabbe, Beery, etc.) (Paramount) Above average Zane Grey western thriller with cast notable for "tough" roles. Trading post days, buffaloes, Indians, covered wagons, fighting plus. Also "great cruelty to horses" but Industry reviewing assures that "children do not take this too seriously."
A—Hardly Y—Perhaps C—If not too strong

Thunder over Mexico (Native Cast) (Principal) Unique travelogue, wonderfully photographed, of Mexican landscape and people, by the master-director Eisenstein. Becomes grim, dramatic episode showing by a single, detailed incident, peons suffering under cruel regime of tyrannous Diaz. Two betrothals, end—one in rape, the other in death by bullet.
A—**Notable** Y—Doubtful interest C—No

Tillie and Gus (Alison Skipworth, W. C. Fields) (Paramount) Lively farce, some slapstick, but much genuinely amusing action in which two artful card sharpers abandon their profession and scheme successfully to prevent fleecing of worthy relative by crooked lawyer. A good picture for all who like hilarious farce.
A—Depends on taste Y—**Amusing** C—**Amusing**

AMONG THE MAGAZINES AND BOOKS

CONDUCTED BY MARION F. LANPHIER

School Life (November) "Electrified Language Teaching," by Clive M. Koon of the Department of Education, Washington, D. C., draws a fascinating picture of a language class in the "school of tomorrow." By means of radio and screen the writer foresees all language classes receiving the same lesson at the same time. By close-up photography the television teacher can effectively show details of tongue placement and lip formation, and can tune in actual situations in the foreign country being studied. But even if all these sight and sound aids were used, the writer believes the classroom teacher would still be indispensable. In fact, he says, "the better the instructor, the more efficient use she can make of the aids science has produced as educational tools."

Science Education (December) An account of the experiment discussed in the article, "The Talking Movie and Students' Interests," by Mr. C. C. Clark, School of Commerce, New York University, has appeared in our pages before. This presentation emphasizes the superiority of sound films over silent films or lecture demonstrations in stimulating interest and maintaining such interest. The author says, "The factor of interest in education has always been an important and significant one as it produces an effective learning situation. . . . The explanation of this suggested superiority of the sound films must be one of two main causes. First, it is that the sound film represents inherently the best educational device for presenting activities to the student in such a way as to challenge and stimulate his interests. . . . The other is that the sound pictures are at present a novelty, and therefore, interesting. . . . In either case, to stimulate this interest the educational sound film should be produced with a high degree of educational skill and reproduced in the classroom with the same technical excellence as that of the theatre."

International Review of Educational Cinematography (December) This number is exclusively dedicated to the publication of reports sent to the Rome Institute as preparatory work for the forthcoming World Congress of Teaching and Education by means of the film. The publication of these reports has been limited for the moment to certain definite features of the programme. Other aspects will be considered and treated in future numbers of the Review from now until the opening of the Congress.

The issue deals with questions of a general character on the possibilities of using films in teaching, including reports by Dr. Imhof of Basle, by Mrs. E. C. Dent, by Messrs Hoek, Wittinghill, Marcucci and Vaccari. The comparative study of the value of fixed and motion picture projections has been compiled from preliminary reports by the writers Hamilton, Juer Marbach and Davis. Other reports of notable importance illustrate certain experiments and uses of the film in teaching. Among these are the contributions by the writers Freeman and Durgee. The reports are followed by comments of the Institute for each of the three sections under consideration.

Book Reviews

FILMCRAFT, by Adrian Brunel. (George Newnes. 3/6.)

FILM TECHNIQUE, by V. I. Pudovkin. (George Newnes. 3/6.)

In the introduction to his book Mr. Adrian Brunel says that he has planned *Filmcraft* primarily as a guide for amateur enthusiasts, although it may amuse professionals. It seems to us that Mr. Brunel's splendid book will instruct a good many professionals. Only the other day a script was written by one of England's most lavish directors: it contained careful instructions that a car was to be shot from two angles to 'give variety in the cutting.'

Filmcraft is packed with practical information told so firmly and gently that the amateur will scarcely realize that he is absorbing the inner secrets of one of the most disguised professions. Here, for example, is one of Mr. Brunel's suggestions. He tells the reader how he acquired a game called Word Making and Word Taking: this is a box of cardboard discs about three-quarters of an inch square, on one side of which are printed letters of the alphabet. The discs bearing the initial letters of different characters were selected and placed on a roughly drawn plan of one of the sets: then he moved about the discs and worked out in advance the best positions of characters during required scenes.

For the most part, Mr. Brunel explains, he has written his book from the point of view of the silent film maker, because the majority of amateurs are not yet equipped for sound, and because the basis of talking film production is almost entirely the same as for silent films, and because the talkies

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themselves tend to become more and more silent. But Mr. Brunel has included a section from a talking film script, as well as a section from the script of one of his last silent movies.

There are numerous appendices by various film workers: Ian Dalrymple, Sergi Nolbandov, Ivor Montagu, Angus MacPhail, Henry Harris, Frank Wells, John Orton, Lionel Rich, Michael Hankinson, Milton Beaufoy, Reginald Beck and Roy Lockwood. Actually, although amateurs are certain to be most interested by these appendices, they seem slightly flippant in tone and a little less useful than Mr. Brunel's own admirable text.

For Mr. Pudovkin's book, in its new and cheap format, there is sure to be a general demand: since this work was first issued by Gollancz, three new papers have been added to bring the work up to date.

OSWELL BLAKESTON.

Visual Aids and the Economic Situation

(*Concluded from page* 13)

six participated in the experiment. Three large experimental groups of 150 pupils each, three large control groups of 150 pupils each, and eleven small control groups of 40 pupils each were the basis of the experiment. The experimental groups were taught with the aid of talking pictures while the other groups were taught with the aid of all other available devices. Common units of instruction were used in all classes. Six subjects, three in elementary science and three in music, were used. Each unit of instruction lasted one week. The teachers in the three large experimental groups, in the three large control groups, and in the three small control groups were rotated each week. The purpose of the experiment has been to determine the relative effectiveness of teaching large groups with the aid of talking pictures and small classes in the usual manner.

Initial and final tests were given for each of the six subjects, involving a total of nearly seventeen thousand tests. The first tabulations indicate that the experimental groups made as much or more progress than the control groups but enough figures are not yet available to draw conclusions. If it should be demonstrated from this experiment that classes of children of 150 can be taught as effectively *with* sound pictures as small groups *without* sound pictures, this fact would be of tremendous significance to education. Administrators cannot ignore a device that offers the economic possibilities that sound pictures do. It is not at all unlikely that this and other visual aids may offer some solution to the perplexing problem of the school budget.

(The *Educational Screen* expects shortly to present another article by Superintendent Stoddard giving a full account of the experiment mentioned above.)

THE CHURCH FIELD

CONDUCTED BY R. F. H. JOHNSON

Visual Aids for Church Programs

Mr. E. K. Esser, Member of the Philadelphia Conference Board of Education, Methodist Episcopal Church, furnishes numerous churches with 16 mm. motion pictures with sound accompaniment which are effective contributions to worship services, teaching and recreation. Available film material listed in his pamphlet entitled "Visual Aids for the Church Program" include *In Bible Lands*, an ideal subject for a worship service showing the Holy Land as it is today, many of the places shown being practically as they were centuries ago—Bethlehem, Haifa, Nazareth, Tiberias, Sea of Galilee, Jericho, Jordan, Dead Sea, Bethany, Jerusalem and Gethsemane. The photography, which was secured from several sources, is professionally made and has been arranged in a most interesting manner. Rev. John W. McKelvey, who spent over a year studying in the Holy Land, has arranged and supplied additional titles to further explain this travelogue.

Films made of the Epworth League Institutes of the Philadelphia Conference, Collegeville, Millersville and Pocono and the Junior Institute held at Carson-Simpson Farm at Willow Grove, provide excellent material for Institute Promotion Programs. The latest of such promotion programs completed by Mr. Esser is a motion picture record of the Paradise Falls Institute of 1933, concerning which he writes in the "Chatter Box":

"See some of the glories of nature beautifully photographed: the day break; the mountains and valleys; the shallow rock strewn Paradise Creek; the waterfalls, etc. See many of your friends going about enjoying the daily program. See the members of the Faculty on the grounds. See the Leaguers in class and attending the great Communion Service."

Entertainment reels can also be obtained for the Church Night Social, or any function held under the auspices of the Bible Class, Brotherhood, Epworth League, Christian Endeavor, etc. Stereopticon service is rendered for every occasion.

For further information readers may write to Mr. E. K. Esser, 3825 North Gratz Street, Philadelphia, Pa.

Motion Pictures for Catholic Audiences

Through the Centuries is an interesting and impressive film record of the development of the Catholic religion from early times to the present. It traces the early beginnings of the Christian martyrs up to the time of the establishment of the church at Rome. The progress of the Church to the present day is shown in animated drawings. From then on it shows the ascension of Pope Pius XI, scenes in the Vatican and at Eucharistic Congresses, the activities of the Catholic Church today, and its missionary operations in such places as China, Alaska and Africa.

Much of the picture has been assembled from newsreels, silent features and other sources, but the story has been blended with careful continuity by Rev. Francis X. Talbot, S. J., under the supervision of Rita C. McGoldrick, president of the Federation of Catholic Alumni. Pedro de Cordoba is the off-screen narrator who describes the action in a running commentary.

Although designed primarily for Catholic church and school audiences, it is a production which should be interesting to any audience and should offer worthwhile study material for students of religion. It is distributed through the Catholic Cinema Service Division of Beacon Films, Inc., New York City.

◆ ◆ ◆

The Shepherd of the Seven Hills, presented by David O'Malley and distributed by Faith Pictures, is another excellent documentary film which gives a brief history of the Church in Rome, and contrasts the Vatican City of today with the ruins of the Early Roman Empire.

It is a comprehensive series of newsreels describing important incidents in the public life of Pope Pius XI, procession of the Swiss Guards, high dignitaries of the church, and visits to His Holiness by Mussolini, and the King and Queen of Italy. It also shows a number of interiors—the Sistine Chapel; the great halls of the Vatican where some of the finest art treasures in the world are kept; art works by Michaelangelo and other great masters.

The film is accompanied by a lecture and a splendid organ musical score sung by John McCormack.

SCHOOL DEPARTMENT

CONDUCTED BY DR. F. DEAN McCLUSKY

Director, Scarborough School, Scarborough-on-Hudson, N. Y.

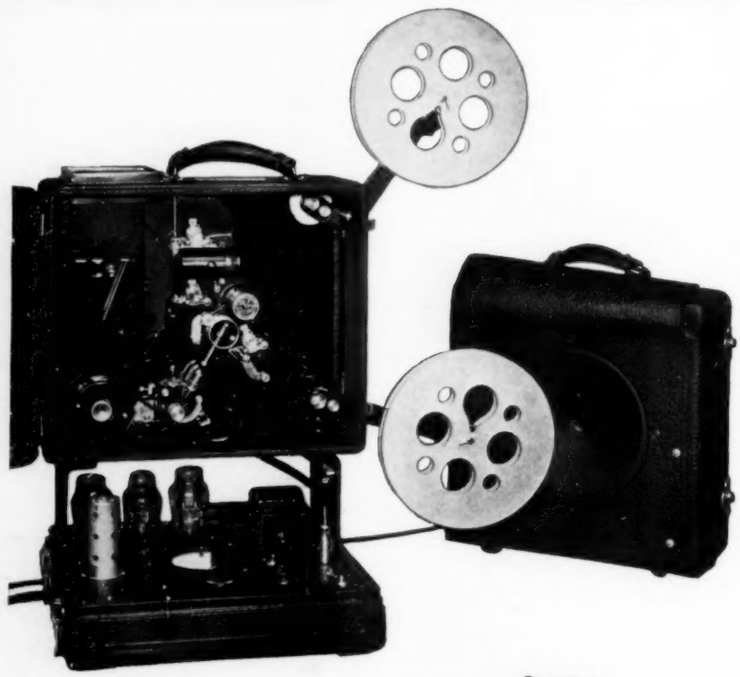
An Enrichment in a Course of Study

FLOYD G. HOEK

IT IS TRUE that a certain degree of formality in teaching has its benefits and should be practiced in almost every curriculum. Just how one may enrich the course of study depends a great deal upon the individual as to his ability, resourcefulness, meticulous care for detail and a definite knowledge of the subject at hand. One ready means of enhancing a course is through the use of visual education. It has been my recent experience with the aid of a faculty member, Mrs. Vivienne Paul, instructor of history in the Longfellow School, Teaneck, New Jersey, to make a study of means and ways of enriching the child's work. Through the use of excellent slides and motion pictures we have reached the conclusion that visual education is a definite means to better instruction. Not only is this true in the upper grades, but down through to the kindergarten as well. Slides were made and used by our kindergarten teachers to illustrate certain ideas and their use intensified the child's interest and learning to a high degree.

The use of slides is an excellent means of putting over to the individual mind certain concepts that cannot be obtained through the common use of the textbook. He gets numerous angles of a certain situation that could not be received through a reading text. Yet I feel there is still another means of enrichment than slides. The motion picture has a definite place in the curriculum and is one of the finest means of enriching the course of study, as we have proved to our own satisfaction in Longfellow School by actual use. We found that there was greater interest shown in the subject matter involved, and a greater desire to know more about the subject, more class responses, and a greater use of text-books other than the basal text.

The problem of discipline in the class seemed to fade away, due to the fact, no doubt, that the child's interest was secured and he had no time for infringement of discipline. We all know that one of the fundamental roots of poor discipline is a lack of in-



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terest in the child's own work. The work in hand can easily seem so dry and void of meaning and interest that the child does not care to use any efforts in absorbing the knowledge given by the teacher.

We have found that through the use of the motion picture a clearer understanding and a more definite conception of the particular phase of work was secured by the pupil. We have tried for a consecutive thirty days, with the use of the Yale Chronicles of America motion pictures and slides, to ascertain the advantages obtained through the use of visual aids. Personally, I feel that no educational institution could not feel itself really progressive unless it took advantage of one of the easiest and most profitable methods of instruction.

Many of the motion pictures in geography, history hygiene, etc., have excellent plans with each specific subject. It has been the past conception of many instructors that it is always necessary to see the picture first and then to formulate plans. This might be true in some cases today, but the average educational motion picture bureau has furnished in many instances plans and subject matter for each picture. I have used many of these plans in the past and have found them complete and accurate in every detail. The references given as correlated material are of inestimable value. The Yale Chronicle series send with each set full details of the picture. All that the average teacher has to do is to read this material, plan her work accordingly and then show the picture.

Of course there are several ways in which one might conduct lessons in visual education. It has been my experience that individual classroom work is far superior to a large group or auditorium work. I have used both methods and have found the former much more profitable, intensive and concise. Here the teacher has better control of her group. She knows just how much that particular group can grasp and knows when and where to stress certain fundamental points within the scope of the pupils.

It seems that all interest in the child in visual education has been largely centered in the seventh, eighth and ninth grades. Unfortunately, too many people have forgotten about the groups in the fourth, fifth and sixth grades. Here is a wonderful opportunity to help develop the latent powers of these minds that are so prone to subject matter and ready to understand and see the finest points and details. Our recent work in the fifth grade has shown that a great many films are suitable to this particular grade. Take the Chronicle pictures for example. The authors seemingly have worked with pupils of the Junior High School levels. It is true that these pictures do fit in admirably well with that level. Practically the same history is taught in the fifth grade only not in such elaborate detail. But that is no definite reason why

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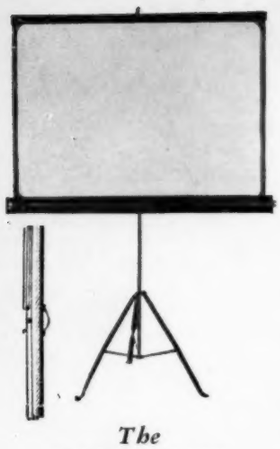
The fastest, most convenient, most economical "still" camera for educational use. LEICA can be quickly converted into a micro camera, stereo camera, telephoto camera, wide angle camera, copying camera, and many others. Over 300 accessories, including a complete line of developing, printing, enlarging, and projection apparatus.

The LEICA Camera has a focal plane shutter with speeds of 1 to 1/500th second; a built-in range finder for quick, accurate focusing. Takes up to 36 pictures on a single roll of cinema film. Enlargements up to 12 x 18 inches. Negatives may also be printed on positive film for projection.

Write for free illustrated booklet containing full information on the LEICA Camera, lenses, and accessories.

THE PROJECTOR FOR ALL SMALL CAMERAS
UDIMO
Universal film and glass slide projector for showing single frame pictures (¾x1 in.), double frame LEICA pictures (1x1½ in.), and 3x4 cm. or one-half the standard vest pocket size negative. All LEICA Camera lenses can be used on the UDIMO, which holds up to 35 feet of positive film. Write for Booklet No. 1209.

Write to E. LEITZ Inc., Dept. 440
60 EAST 10th STREET NEW YORK



The
CHALLENGER

A portable screen that is outstanding! Compact, simply operated, with self-supporting feature. Needs no table; readily placed anywhere, with picture surface approximately 45" off the floor. Swivel bracket fitting grooved tripod tube provides rapid, easy adjustment and keeps screen in perfect alignment. Strongly constructed; folds compactly for storage and transportation.

30" x 40" — $20.00
36" x 48" — $25.00
39" x 52" — $30.00

"STANDARD EQUIPMENT"

— So do many of the most successful visual educators refer to "DA-LITE" screens! They appreciate the quality of DA-LITE'S brilliant glass-bead reflective surface that gives pictures new, life-like brilliancy. They like the convenience of DA-LITE's compactness and easy portability. They are grateful for the fair DA-LITE prices that keep equipment costs minimized. You, too, will like DA-LITE screens. Inspect the entire comprehensive line at a dealer's near you — or write us direct for circulars and the address of a nearby distributor.

THE DA-LITE SCREEN CO., INC.
2721 N. CRAWFORD AV.
CHICAGO, ILL.

BARGAINS!!!

WRITE
SUNNY SCHICK
Cinemachinery Brokers
I have what you want, or can sell what you have.
Bargains in Equipment:
BELL & HOWELL
EASTMAN
SIMPLEX
VICTOR
STEWART-WARNER
Save 30% to 60% on cameras, projectors and accessories.
407 W. Washington Blvd.
Since 1925 Fort Wayne Indiana

the motion picture cannot give a better conception of history. We have proved that the boys and girls at our school have shown a marked improvement in their work in history through the use of visual education. We feel, and have actual proof herewith attached, that the motion picture is of great value. It has brought up a group, supposedly slow, to the level of a superior group. We have found that this particular group without the use of the motion pictures and slides seems to have a few disciplinary problems, a comparative lack of interest in their work, and a desire to do as little as possible. But after the introduction of visual aids, and a definite assignment and correlation of material with such aids, a greater interest and a higher standard of proficiency was reached by the pupils involved. A glance at the accompanying graphs gives conclusive proof of this statement. A greater use of the school library was noticed by the librarian and a greater desire for deeper and more interesting material was seen. Visual aids can produce better trained students.

A peculiar incident took place. Dr. Knowlton of New York University, an authority on the use of motion pictures in the school, informed us, or felt, that not so much interest would be noticed in the use of the film *Declaration of Independence*, especially in the fifth grade. On the contrary a greater interest was noticed. To my mind this proved conclusively that these boys and girls had a definite purpose in mind when shown these pictures, and these films brought out details that were seldom noticed otherwise.

Method of Presentation:

The three fifth grades in which the research was to be carried on were tested by standardized tests and divided into a superior group, normal group and inferior group.

The work was divided into three units, each of which was presented in the three fifth grades in the same way. The teaching of each class was carefully checked and reading material pertaining to each unit was controlled so as to provide a fair basis for comparison.

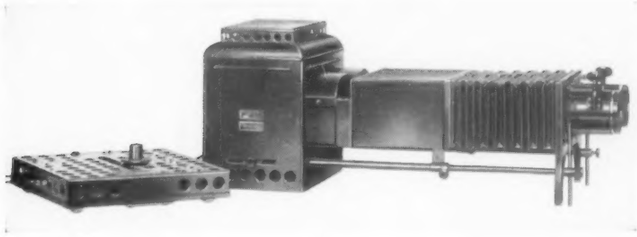
At the conclusion of each unit of work, one class was shown a motion picture on the subject taught; a second class was shown slides on the subject; and the third class was given no Visual Instruction. This procedure was immediately followed by a test in all three grades.

Conclusions Drawn from Results:

1. The lower group, when shown a motion picture which supplemented the teaching of the unit, were brought up almost to the level of the superior group that had had no visual work.

2. When the superior group, however, saw the motion picture, such a marked improvement was not

The DISSOLVING VIEW BALOPTICON



the Most Pleasing Way to Present Slides

WITH Balopticon B B L the picture on the screen dissolves into the succeeding one in a very restful, pleasing manner. Does away completely with the "racing" of the slides across the screen. Even the short interval of darkness between slides is entirely eliminated. Not only relieves eye strain, but holds the attention of your audience without interruption.

This equipment is really two lanterns in one, and so compactly arranged that it can easily be put in one carrying case. Can be used for stereoscopic projection with the use of proper filters and with colored spectacles for the spectators.

Although two 500 Watt Mazda prefocused lamps are used, they are so arranged that more than 500 watts is never drawn at one time. Accordingly the apparatus requires but one lead wire and can be connected to any regular lighting socket.

CATALOG E-12 GLADLY SENT ON REQUEST

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B & L GLASS IS USED IN B & L MICROSCOPES, TELESCOPES, BINOCULARS, SPECTACLE LENSES AND FRAMES OPHTHALMIC APPARATUS, SCIENTIFIC INSTRUMENTS.

BAUSCH & LOMB OPTICAL CO., 688 ST. PAUL ST., ROCHESTER, N.Y., U.S.A.

shown. The most logical reason for this seems to be that the pupils of the superior group, having greater reading ability, reach their capacity for absorption of subject matter prior to the showing of the picture. Even in this group, however, the results of the test showed the class to be more homogeneous as a result of the visual work.

Great care was exercised in securing the data furnished and plans were made with meticulous care by the instructors in charge. Actual experience and not only theory has been the basis for the conclusions reached. The American Revolution was not taught as a whole, but was taught as represented in the picture and then the results achieved were noted.

We wish to thank Dr. Lester N. Neulen, Supervisor of Teaneck Public Schools, for his careful and sympathetic support and guidance in helping us to enrich our course of study in the Longfellow School; Dr. Knowlton, of New York University, for his advice; The Yale University Press Film Service for their cooperation in the use of the motion pictures, and Mr. Ellsworth C. Dent, of Kansas University, for his cooperation in the use of slides.

Films in Japan Schools

At the general assembly of the National Association of the Cinema in Education, in Japan, the chief subject of discussion was the introduction of the cinema in the elementary schools. Five committees were instituted to deal with the use of films in the teaching of ethics and history, the national language, geography, mathematics and natural science, and vocational training. Another committee was created to consider the production of films for science teaching in secondary schools, the use of films for all subjects in these schools, and in all social organizations.

Photo Art Monthly

A magazine appealing particularly to Educators and those interested in Visual Instruction through the photographic depiction of scientific and beautiful subjects.

It covers its subjects authoritatively by offering only the best writers in their specialized branches.

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AMONG THE PRODUCERS

Where the commercial firms — whose activities have an important bearing on progress in the visual field — are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necessary space limitations, such material as seems to have most informational and news value to our readers.

New DeVry 16mm Sound-on-Film Projector

In non-theatrical circles a most auspicious event for the New Year, is the announcement of the new 16 mm. sound unit by DeVry. The popular DeVry "suit case" type of construction is the first striking feature of the new unit. This makes for easy carriage, and added rigidity.

In other respects it follows the construction design of the DeVry 35 mm. sound unit. The remarkable success of that machine inspires immediate confidence in the 16 mm. sound. The same sound head, the same amplifier and dynamic speaker—all scaled down to 16 mm. requirements—are found in this new item. The 750 watt lamp with a blower type cooling system insures ample illumination, and the built-in type sound unit takes care of audiences up to 1500—with volume to spare.

As to sound quality,—the ear can detect no differences from that of the larger installations. There are a number of features exclusive with DeVry, among them the double exciter lamp socket.

The low cost will prove a boon to schools in this period of national economy, and it also enables the smaller industries to duplicate those record orders DeVry has been getting from Ford, Firestone, etc., for the 35 mm. unit.

Further Demand for DeVry Equipment

The type had scarcely been dry on DeVry's December ad announcing the shipment of 78 sound outfits to Ford, when the new order for 60 more came in from Firestone. These are record orders from industry and constitute a further indication of the importance of the non-theatrical field for motion pictures.

As an outstanding pioneer in this field, Herman A. DeVry has made significant contributions especially in the school and church realms, both in apparatus and in films. The DeVry School Films comprising 86 reels on school subjects are a monument to his faith in the educational phase of motion pictures.

Visomatic Opens New Office

Visomatic Systems, Inc., of 292 Madison Avenue, New York City, announces the formation of the Visomatic Company of New England, with headquarters at 25 Huntington Avenue, Boston. The new company is headed by George K. Thompson, formerly vice-president and sales manager of M. H. Rhodes, Inc., and long active in New England as district sales representative for several electrical equipment manufacturers.

New Color for Slide Making

Satisfactory coloring of hand-made lantern slides and other transparencies has recently been made possible by the development and introduction of *Scarborite*.

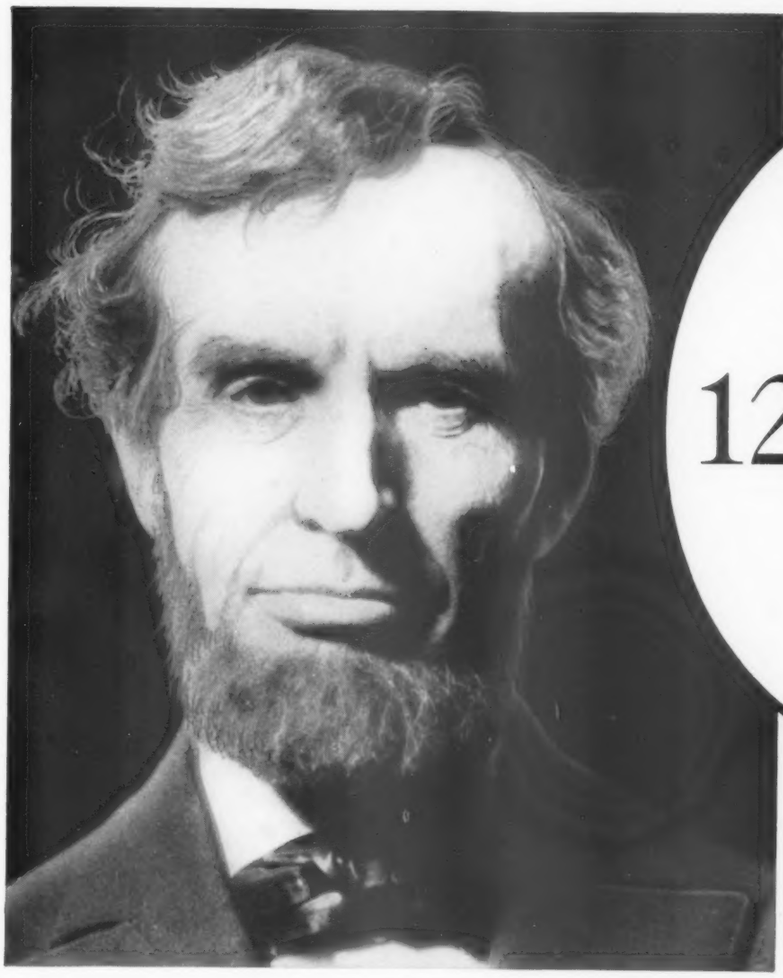
This brilliant, transparent color does not require a specially prepared or coated surface. It is specially adapted to drawing and coloring hand-made lantern slides on clear or etched glass, celluloid, cellophane, gelatin, or any other transparent material which may be used for the purpose. This includes not only pupil and teacher-made slides for classroom use, but also announcement slides for lecturers and theatres and for projecting color effects in theatrical work. Charts and graphs for use at conventions, etc., may also be effectively presented by Scarborite lantern slides.

It may be used on certain kinds of photographic lantern slides, such as reproductions of maps and charts, or other line drawings, where definite divisions of clear color are desired. It is ideal for painting slides for toy magic lanterns. Due to its perfect transparency, the pictures are extraordinarily clear and brilliant. While primarily intended for coloring glass slides, it may be used on stained glass, lamp shades, vases and transparencies on celluloid, etc., and will give the effect of glazed enamel when used over opaque material.

Scarborite is easily applied with either brush or pen, is quick drying, heat proof, waterproof, perfectly transparent, brilliant, durable, will not fade and is easily removed with a special solvent included with the colors. The seven Scarborite colors may be reduced to lighter shades or mixed to produce different colors.

This development is not in an experimental stage. It has been used for a period of six months at Scarborough School, Scarborough, New York, where it was originally developed to fill a need for a color which could be easily used on hand-made lantern slides. For this purpose it is ideal, combining, as it does, ease of application with effective and permanent results.

Scarborite Colors will gladly furnish a sample lantern slide showing the colors, and any other additional information desired. 10c in stamps should accompany such inquiries.



Born 125 years ago...

...he lives again today in this classroom film

ON February 12, 1934—the 125th anniversary of Lincoln's birth—thousands of pupils from coast to coast will be given a truer, more vivid conception of the Great Emancipator's life than was ever possible before. For on that day the stirring two-reel picture *Abraham Lincoln* will be shown in hundreds of classrooms.

As scene after scene flashes on the screen, a thrilling story will be unfolded. These pupils will pass the Kentucky frontier with Lincoln ... see him as clerk and postmaster in New Salem ... follow his success at Springfield ... and cheer him on his way to become President. They will watch his struggles to save the nation ... feel his sorrows when war comes ... live over the memorable scenes at Gettysburg ... in short, they will relive his inspiring life, all in a period of thirty minutes.

This truly great picture has been especially prepared for classroom use. Authenticity has been assured by painstaking research. George Billings, undoubtedly the greatest impersonator of Lincoln, plays the title role.

Give your pupils the benefit of this inspirational picture. Let them *know* Lincoln. The film, complete in two 16-millimeter reels, costs but $48, including transportation. Projection equipment is not expensive. For information, write: Eastman Teaching Films, Inc. (Subsidiary of Eastman Kodak Co.), Rochester, N. Y.

REEL I—*The Pioneer*

Lincoln's youth. His struggle for education. First contact with the world and slavery. The Black Hawk War. First experience in politics in Illinois legislature. Postmaster at New Salem. Removal to Springfield to practice law. Marriage and family life. Incidents in the Lincoln-Douglas debates. Endorsement for President by the Illinois Republican State Convention. Nomination for president. Departure from Springfield after election to the presidency.

REEL II—*The Statesman*

Lincoln's responsibilities as president in a critical period. Fort Sumter. Call for volunteers. Arrival of the first regiments. Scenes of the war. Lincoln's visit to a field hospital. His clemency toward the court-martialed sentry. The Emancipation Proclamation. Battle of Gettysburg. The Gettysburg address. Grant's final campaigns. Lee's capitulation. General rejoicing following the surrender. The fateful performance at Ford's Theatre. Lincoln's death.

Eastman CLASSROOM FILMS

HERE THEY ARE!

A Trade Directory for the Visual Field

FILMS

Arnco Films, Inc. (5)
1270 Sixth Ave., New York City.

Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City

Carlyle Ellis (1, 4)
53 Hamilton Terrace, New York City
Producer of Social Service Films

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Eastman Teaching Films, Inc. (1, 4)
Rochester, N. Y.
(See advertisement on page 27)

Edited Pictures System, Inc. (1, 4)
330 W. 42nd St., New York City

Garrison Film (3, 4)
729 Seventh Ave., New York City.
(See advertisement on page 23)

Ideal Pictures Corp. (1, 4)
30 E. Eighth St., Chicago, Ill.

Modern Woodmen of America (3, 4)
Rock Island, Ill.

Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.

Ray-Bell Films, Inc. (3, 6)
817 University Ave., St. Paul, Minn.

Stewarts School Films (4)
21 Liberty St., Trenton, N. J.

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Corp. (3)
730 Fifth Ave., New York City
(See advertisement on page 1)

Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y. M .C. A. Motion Picture Bureau (1, 4)
347 Madison Ave., New York City
19 S. LaSalle St., Chicago, Ill.

MOTION PICTURE MACHINES and SUPPLIES

Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on inside back cover)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1)
330 W. 42nd St., New York City

Herman A. DeVry, Inc. (3, 4)
1111 Center St., Chicago
(See advertisement on page 22)

Ideal Pictures Corp. (1, 4)
26 E. Eighth St., Chicago, Ill.

International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)

Motion Picture Accessories Co. (3, 6)
43-47 W. 24th St., New York City

New England Motion Picture Equipment Corp. (3, 6)
356 Worthington St., Springfield, Mass.

Regina Photo Supply Ltd. (3, 6)
1924 Rose St., Regina, Sask.

Sunny Schick (3, 6)
Fort Wayne, Ind.
(See advertisement on page 24)

United Projector and Film Corp. (3, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 4)

Weber Machine Corp. (2)
59 Rutter St., Rochester, N. Y.
(See advertisement on page 2)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

PHOTOGRAPHS and PRINTS

Photographic History Service
5537 Hollywood Blvd., Hollywood, Cal.
(See advertisement on page 2)

SCREENS

Da-Lite Screen Co.
2721 N. Crawford Ave., Chicago
(See advertisement on page 24)

Motion Picture Accessories Co.
43-47 W. 24th St., New York City

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

Conrad Slide and Projection Co.
510 Twenty-second Ave., East Superior, Wis.

Eastman Educational Slides
Iowa City, Ia.

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
26 E. Eighth St., Chicago, Ill.

Keystone View Co.
Meadville, Pa.
(See advertisement on page 2)

Radio-Mat Slide Co., Inc.
1674 Broadway, New York City
(See advertisement on page 23)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 1)

Victor Animatograph Corp.
Davenport, Iowa
(See advertisement on page 4)

Williams, Browne and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

Herman A. DeVry, Inc.
1111 Center St., Chicago
(See advertisement on page 22)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 2)

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 25)

E. Leitz, Inc.
60 E. 10th St., New York City
(See advertisement on page 23)

Regina Photo Supply Ltd.
1924 Rose St., Regina, Sask.

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 1)

Victor Animatograph Corp.
Davenport, Iowa
(See advertisement on page 4)

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REFERENCE NUMBERS

(1) indicates firm supplies 35 mm. silent.
(2) indicates firm supplies 35 mm. sound.
(3) indicates firm supplies 35 mm. sound and silent.
(4) indicates firm supplies 16 mm. silent.
(5) indicates firm supplies 16 mm. sound-on-film.
(6) indicates firm supplies 16 mm. sound and silent.

IS YOUR firm represented here? It should be. Continuous insertions under one heading cost only $1.50 per issue; additional listings under other headings, 50c each.

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there you'll find

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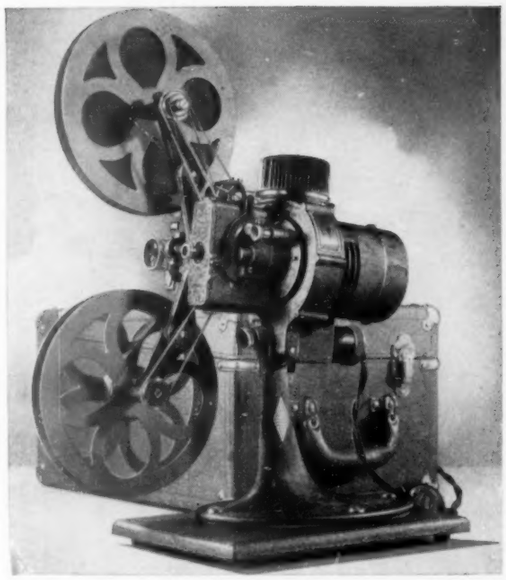
SCHOOL PROJECTORS

THE most advanced methods in the use of motion pictures as a part of the educational program call for projection equipment that can give commensurate screen results. That is why Filmo is to be found in nearly every school system where more than ordinary progress has been made in visual education. For Filmo is the co-partner of all that is foremost and successful in visual education.

In Philadelphia public schools, where visual education has forged ahead by leaps and bounds under an enlightened and efficient management, approximately 100 Filmo School Projectors are used. This means that the continued progress of visual education in Philadelphia is guaranteed to be free from at least one retarding influence—mechanical equipment requiring constant service. With months and years of perfect performance already to their credit, Philadelphia's Filmos will continue to serve at peak efficiency with a minimum of attention.

In its brilliant projection, its smooth and easy operation, its silence, and its longevity, the Filmo School Projector has held first rank since movies were introduced into the school room. And Filmo will continue to hold this position, because it is the product of intelligent design and Bell & Howell's twenty-seven years of experience in supplying the cinemachinery for the leading film producers of the world.



The Filmo R Projector, with case. With 750-watt lamp, $212.50 and up. With 500-watt 110-volt lamp, $195; less clutch, reverse, power rewind, and case, $145.

EDUCATIONAL
WORLD'S FAIR FILMS

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Action models, most of them to scale, of prehistoric dinosaurs, mammals, and men. 400 ft., 16 mm. $20.

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Position.....School.....

Address.....

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EVERY REEL

WHEN you show 35-millimeter pictures without a projection booth, the film must be of the safety type. Common caution demands it...underwriters' requirements insist upon it. In ordering pictures, specify that they be printed on Eastman Safety Film. Before projecting, be sure that the identification *Eastman...Safety...Kodak* appears in the margins at regular intervals...from the beginning to the end of every reel. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

EASTMAN

Safety Film